

SC1001

Conductor

Description

SC1001 is a screen printable 99:1 Silver / Platinum conductor for application of dielectric on steel. SC1001 shows excellent fired film density, high conductivity, good solder leach resistance, and excellent solder acceptance.

Key Features

- Excellent solderability
- Compatible for SD1010A and SD1019
- Compatible with SR21 and SR22 Series resistors
- Excellent initial and aged adhesion, even after multiple firings
- Very good conductivity
- Excellent fired film density

Typical Properties

Viscosity	20 - 40 Pa·s, 25°C, D = 100/s
Solids	82.5 ± 1.5%
Resistivity	≤ 3.5 mΩ/sq (FFT: 12µm)
Solderability	62Sn/36Pb/2Ag: Good ≥ 95% (235°C, 5 sec dip) as-sessment acc. DIN 41850-2 E
Solder Leaching	62Sn/36Pb/2Ag: ≥ 4 dips (235°C, 10s each)#Sn96/Ag3.5/Cu0.5: ≥ 5 dips (245°C, 5s each)
General Adhesion	62Sn/36Pb/2Ag: ≥ 18N (48h, 150°C) aged adhesion

Recommended Processing Guide

Printing Parameters	Print through a 200 - 325 mesh stainless steel screen.
Printing Speed	Up to 20 cm/s

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Recommended Processing Guide (continued)

Leveling	Level at room temperature for 5 - 10 minutes
Drying Temperature	Dry at 150°C for 10 - 20 minutes
Process Temperature (TDS)	Fire at 850°C (peak) for 10 - 12 minutes, and with total firing cycle time of c. 30 - 60 minutes
Film Thickness	10 - 15 µm
Paste Compatibility	Dielectric: SD1010A Overglazes: SD1010A, SD1019 Resistors: SR21 and SR22 Series

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Warranty

Material guaranteed to meet specifications for 6 months from date of manufacturing with proper storage.

Storage

Store in a dry, cool (5 - 25°C), dark place with container tightly shut. Allow paste to come to room temperature prior to opening. Spatulate well before using.